NATURESERVE CONSERVATION STATUS RANKS

NATURESERVE GLOBAL CONSERVATION STATUS DEFINITIONS

Listed below are definitions for interpreting NatureServe's global (range-wide) conservation status ranks. Global conservation status ranks are assigned by NatureServe scientists or by a designated lead office in the NatureServe network.

Global (G) Conservation Status Ranks

| Rank | Definition |
|------|--|
| GX | Presumed Extinct (species) — Not located despite intensive searches and virtually no likelihood of rediscovery. Presumed Eliminated (ecosystems, i.e., ecological communities and systems) — Eliminated throughout its range, due to loss of key dominant and characteristic taxa and/or elimination of the sites and ecological processes on which the type depends. |
| GH | Possibly Extinct (species) or Possibly Eliminated (ecosystems) — Known from only historical occurrences but still some hope of rediscovery. Examples of evidence include (1) that a species has not been documented in approximately 20–40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is extinct or eliminated throughout its range. |
| G1 | Critically Imperiled — At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors. |
| G2 | Imperiled — At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. |
| G3 | Vulnerable — At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. |
| G4 | Apparently Secure — At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors. |
| G5 | Secure — At very low risk or extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats. |

Variant Global Conservation Status Ranks

| Rank | Definition |
|------|---|
| G#G# | Range Rank — A numeric range rank (e.g., G2G3, G1G3) is used to indicate uncertainty about the exact status of a taxon or ecosystem type. Ranges cannot skip more than two ranks (e.g., GU should be used rather than G1G4). |
| GU | Unrankable — Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. Note: whenever possible (when the range of uncertainty is three consecutive ranks or less), a range rank (e.g., G2G3) should be used to delineate the limits (range) of uncertainty. |
| GNR | Unranked – Global rank not yet assessed. |
| GNA | Not Applicable — A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities. 1 |

Rank Qualifiers

| Rank | Definition |
|------|--|
| ? | Inexact Numeric Rank — Denotes inexact numeric rank; this should not be used with any of the Variant Global Conservation Status Ranks or GX or GH. |
| Q | Questionable taxonomy that may reduce conservation priority— Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or inclusion of this taxon or type in another taxon or type, with the resulting taxon having a lower-priority (numerically higher) conservation status rank. The "Q" modifier is only used at a global level and not at a national or subnational level. |
| С | Captive or Cultivated Only — Taxon or ecosystem at present is presumed or possibly extinct or eliminated in the wild across their entire native range but is extant in cultivation, in captivity, as a naturalized population (or populations) outside their native range, or as a reintroduced population or ecosystem restoration, not yet established. The "C" modifier is only used at a global level and not at a national or subnational level. Possible ranks are GXC or GHC. This is equivalent to "Extinct in the Wild (EW) in IUCN's Red List terminology (IUCN 2001). |

Infraspecific Taxon Global Conservation Status Ranks

Infraspecific taxon status ranks apply to species only; these ranks do not apply to ecological communities or systems.

| Rank | Definition |
|------|--|
| T# | Infraspecific Taxon (trinomial) — The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T subrank cannot imply the subspecies or variety is more abundant than the species, for example, a G1T2 subrank should not occur. A vertebrate animal population (e.g., listed under the U.S. Endangered Species Act or assigned candidate status) may be tracked as an infraspecific taxon and given a T rank; in such cases a Q is used after the T-rank to denote the taxon's informal taxonomic status. |

¹ A global conservation status rank may be not applicable for several reasons, related to its relevance as a conservation target. In such cases, typically the species is a hybrid without conservation value, of domestic origin, or the ecosystem is non-native, for example, ruderal vegetation, a plantation, agricultural field, or developed vegetation (lawns, gardens etc).

NATURESERVE NATIONAL AND SUBNATIONAL CONSERVATION STATUS DEFINITIONS

Listed below are definitions for interpreting NatureServe conservation status ranks at the national (N-rank) and subnational (S-rank) levels. The term "subnational" refers to state-, province- or territory-level jurisdictions (e.g., California, Ontario).

Assigning national and subnational conservation status ranks for species and ecosystems (ecological communities and systems) follows the same general principles as used in assigning global status ranks. Historically, a subnational rank, however, could not imply that a species or ecosystem is more secure at the state/province level than it is nationally or globally (e.g., a rank of G1S3 is invalid), and similarly, a national rank could not exceed the global rank. But this rule is under review, because current methods provide a more explicit role for Threats and Trends, which may indicate low levels of risk at national/subnational scales as compared to global scales. Subnational ranks are assigned and maintained by state or provincial NatureServe network programs.

National (N) and Subnational (S) Conservation Status Ranks

| Rank | Definition |
|----------|--|
| NX SX | Presumed Extirpated —Species or ecosystem is believed to be extirpated from the jurisdiction (i.e., nation, or state/province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. [Equivalent to "Regionally Extinct" in IUCN Red List terminology] |
| NH SH | Possibly Extirpated – Known from only historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in the jurisdiction, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction. |
| N1 S1 | Critically Imperiled — At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors. |
| N2 S2 | Imperiled — At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. |
| N3 S3 | Vulnerable — At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. |
| N4 S4 | Apparently Secure — At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors. |
| N5 S5 | Secure — At very low or no risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats. |

Variant National and Subnational Conservation Status Ranks

| Rank | Definition |
|-----------------|--|
| N#N# S#S# | Range Rank —A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4). |
| NU SU | Unrankable—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. |
| NNR SNR | Unranked—National or subnational conservation status not yet assessed |
| NNA SNA | Not Applicable —A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities. ¹ |
| Not Provided | Species or ecosystem is known to occur in this nation or state/province. Contact the appropriate NatureServe network program for assignment of conservation status. |

Long distance migrants: Assigning conservation status to long distance aerial or aquatic migrant animals (e.g., species like migrant birds, bats, butterflies, sea turtles, and cetaceans) during their migrations is typically neither practical nor helpful to their conservation. During their migrations, most long distance migrants occur in an irregular, transitory, and dispersed manner. Some long distance migrants occur regularly, while others occur only as accidental or casual visitors to a subnation or nation. Some long distance migrants may regularly occur as rare breeding or non-breeding seasonal (e.g., winter) species, but in an inconsistent, spatially irregular fashion, or as breeders that die out apparently with no return migration and no overwintering (e.g., some Lepidoptera). In all these circumstances, it is not possible to identify discrete areas for individual species that can be managed so as to significantly affect their conservation in a nation or subnation. The risk of extinction for these species is largely dependent on effective conservation of their primary breeding and non-breeding grounds, notwithstanding actions that may benefit species collectively such as protecting migratory "hotspots," curbing pollution, minimizing deaths from towers and other obstructions, etc.

An exception is those species, such as shorebirds, whose populations concentrate at particular areas during migration, and species occurring in multiple species assemblages at migration "funnels" or hotspots. Such species may be collectively treated within "Animal Assemblage" elements, for which conservation status assignment would be appropriate. Examples of such assemblages are Shorebird, Waterfowl, Landbird, and Raptor Migratory Concentration Areas. Species considered within assemblage elements differ from the more common situation during migration, whereby most long distance migrants are tied to particular places and habitats during their breeding season, as well as during the non-breeding [e.g., wintering] season when they are not in transit. For these species, conservation of both types of places is important to minimize their risk of extinction.

Hybrids without conservation value and non-natives: It is not appropriate to assign a conservation status to hybrids without conservation value, or to non-native species or ecosystems. However, in the rare case where a species is presumed or possibly extinct in the wild (GXC/GHC) but is extant as a naturalized population outside of its native range, the naturalized population should be treated as a benign introduction, and should be assessed and assigned a numeric national and/or subnational conservation status rank. The rationale for this exception for naturalized populations is that when a species is extinct over its entire natural range, the presence of that species within an area must be considered important to highlight and preserve, even if the area is not part of the species' natural range.

¹ A conservation status rank may be not applicable for some species, including long distance aerial and aquatic migrants, hybrids without conservation value, and non-native species or ecosystems, for several reasons, described below

Rank Qualifier

| Rank | Definition |
|------------|---|
| N#? S#? | Inexact Numeric Rank—Denotes inexact numeric rank; this should not be used with any of the Variant National or Subnational Conservation Status Ranks, or NX, SX, NH, or SH. |

Breeding Status Qualifiers²

| Qualifier | Definition | |
|-----------|--|--|
| В | Breeding —Conservation status refers to the breeding population of the species in the nation or state/province. | |
| N | Non-breeding —Conservation status refers to the non-breeding population of the species in the nation or state/province. | |
| M | Migrant —Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province. | |

² A breeding status is only used for species that have distinct breeding and/or non-breeding populations in the nation or state/province. A breeding-status S-rank can be coupled with its complementary non-breeding-status S-rank if the species also winters in the nation or state/province. In addition, a breeding-status S-rank can also be coupled with a migrant-status S-rank if, on migration, the species occurs regularly at particular staging areas or concentration spots where it might warrant conservation attention. Multiple conservation status ranks (typically two, or rarely three) are separated by commas (e.g., S2B,S3N or SHN,S4B,S1M).